

**PTO: 2000-558**

**Japanese Published Unexamined (Kokai) Patent Application No. H9-198554, published July 31, 19997; Application No. H8-6947, filed January 19, 1996; Int. Cl.6: G07F 9/00 5/22; Inventor: Tsuneharu Koga; Assignee: Fuji Electric Corporation; Japanese Title: Jidouhanbaiki (Dispenser)**

---

**[Title of Invention]**

**Dispenser**

**[Summary]**

**[Issue]**

**To reduce unsold remaining food products to be discarded by using a dispenser that sells said food products after cooking and storing before selling them.**

**[Means to Solve the Problem]**

**Before selling food products, said foods are cooked with a food cooking device 8; said cooked foods are stored in a food storing device 9. A counter 4 begins to count a time simultaneously at the beginning of said storing; a CPU 1 reduces the selling price of the food product by a predetermined price in accordance with the elapsed time period; the price is displayed onto a price display device 6. When coins are input and when a pressing button 7 is pressed, a food product is sold with the price that is displayed onto price display device 6 at the time. By means of this, as products get close to the appreciation time limit, said products can be purchased at a lower cost; for said reason, the sales of food products are accelerated;**

**the amount of unsold remaining food products can be reduced.**

**[Claim]**

**[Claim 1]**

**A dispenser that sells food products which are cooked and stored in advance before selling them, characterized by being comprised of the following means: a memory means that stores a product price according to the elapsing time from the beginning of the storage to the appreciation time limit; a time counting means that counts the elapsing time from the beginning of the storage; a display means that reads the selling price of a product from said memory means and that displays the current product price onto it; a control means that sells food products based on the prices displayed onto said display means.**

**[Detailed Description of the Invention]**

**[0001]**

**[Field of Industrial Application]**

**This invention pertains to dispensers that sell food products which are cooked and stored in advance before selling them.**

**[0002]**

**[Prior Art]**

**As for, for example, conventional beverage dispensers with extractors, beverages are extracted and supplied every time they are sold; because of this, it takes a time until the sales**

are completed. For said reason, as for, for example, dispensers that sell coffee and the like, a dispenser is known, such that the number of cups to be sold is estimated from the previous sale record, coffee beans are ground, cooked, and stored in advance, and that the selling time is shortened (for example, refer to Japanese unexamined patent application No. H2-288998).

[0003]

[Problem of Prior Art to Be Addressed]

A dispenser that cooks and stores beverages before selling them, as described above, has the following problem. For example, regular coffee, more the time elapses after it has been cooked, more the flavor decreases; for said reason, the appreciation time limit is usually provided; unsold coffee when the time limit comes was discarded because it cannot be sold as a product.

[0004]

The issue of the present invention is to reduce unsold products to be discarded by using a dispenser that sells products cooked and stored before selling them.

[0005]

[Measures to Solve the Problem]

As for a dispenser of the present invention that sells food products which are cooked and stored in advance before selling them, it comprises the following means: a memory means that stores a product price according to the elapsing time from the beginning of the storage to

the appreciation time limit; a time counting means that counts the elapsing time from the beginning of the storage; a display means that reads the selling price of a product from said memory means and that displays the current product price onto it; a control means that sells food products based on the prices displayed onto said display means.

[0006]

By said means, as products have a longer elapsing time from the beginning of the storage and are closer to the appreciation time limit, they can be obtained at a lower price; because of this, the sales of products are accelerated; unsold products to be discarded are reduced.

[0007]

[Embodiment of the Invention]

Fig.1 is a structural block diagram illustrating an embodiment of the present invention. Reference number 1 refers to a CPU that controls the entire dispenser; a ROM 2 with a control program stored, a RAM 3 that stores various types of data, and counter 4 for a time counting are connected to CPU 1. The following devices are also connected to CPU 1 via an I/O 5, such as product cooking device 8 that cooks food products including beverages, product storing device 9 that stores cooked food products, a product loading device 10 that loads products, pressing button 7 that selects products, and price display device 6 that displays the product prices.

**[0008]**

**Fig.2 is a flowchart illustrating main operations of the present invention. The operations are described with reference to Fig.1. First, a food product is cooked at a predetermined timing following the command of CPU 1 before it is sold by using product cooking device 8; when said cooked product is stored into product storing device 9 (step S1), counter 4 begins to count the elapsing time (step S2).**

**[0009]**

**Next, CPU 1 determines whether the appreciation time limit is reached from the beginning of the counting or not (step S3); if the appreciation time limit has elapsed, because (branch N) it is at the appreciation time limit, the sales are not made; a sold-out sign is displayed (step S8); by means of this, the operation is completed. If the appreciation time limit has not elapsed yet (branch Y), CPU 1 reduces and calculates the product sale price according to the elapsing time; the price is displayed onto price display device 6 (step S4).**

**[0010]**

**Next, CPU 1 determines whether coins are input or not so as to purchase a product (step S5); if the coins are not input, (branch N) the operation returns to step 3. If the coins are input, (branch Y), the user waits until the price becomes purchasable, more specifically until the price becomes a price displayed onto display device 6 at that point (step S6); when a proper price is obtained, if pressing button 7 is pressed, a cooked and stored product is sold by using product loading device 10 (step S7); after this, the operation returns to step S3.**

**[0011]**

By said operations, as the appreciation of product time limit is closer while the time elapses from the beginning of the storage, said products can be purchased at a lower price; because of that, it is easier to sell products, and the amount of unsold products to be discarded can be reduced.

**[0012]**

**[Advantageous Result of the Invention]**

According to the present invention, by using a dispenser that sells products after cooking and storing before selling them, longer the elapsing time is for the products from the beginning of the storage, more the sale prices are reduced, and said reduced prices are displayed, the sales of products with a decreased product longevity can be accelerated, and the amount of unsold products to be discarded can be reduced.

**[Brief Description of the Invention]**

**[Fig.1]**

Fig.1 is a structural block diagram illustrating an embodiment of the present invention.

**[Fig.2]**

Fig.2 is a flowchart illustrating operations based on the present invention of Fig.1.

**[Description of the Reference Numbers]**

**1...CPU**

**2...ROM**

**3...RAM**

**4...Counter**

**5...I/O**

**6...Price Display device**

**7...Pressing button**

**8...Product cooking device**

**9...Product storing device**

**10...Product loading device**

**Translations Branch**

**U.S. Patent and Trademark Office**

**11/16/99**

**Chisato Morohashi**